# 8th Frankfurt MathFinance Conference Derivatives and risk management in theory and practice

#### 17-18 March 2008

Join Germany's leading Quant Conference

Details and registration at http://conference.mathfinance.com.

#### List of speakers

Prof Claudio Albanese Independent Consultant

Dr Alexander Antonov Numerix

Dr Oliver Caps Dresdner Bank Andrea Odetti&Sanjeev Shukla Commerzbank

Dr Markus Himmerich d-fine

Dr Jürgen Hakala Standard Chartered Fiodar Kilin Quanteam AG

Prof Antje Mahayni University of Duisburg-Essen

Dr Jan Maruhn UniCredit Markets & Investment Banking

Prof Hans Mittelmann Arizona State University
Prof Goran Peskir University of Manchester

Dr Kay Pilz Sal. Oppenheim

Prof Eckhard Platen Sydney University of Technology

Prof Rolf Poulsen University of Copenhagen

Dr Dietmar Schölisch AXA
Dr Sven Ludwig&Håkan Norekrans Sungard
Dr Jianwei Zhu LPA

#### **Topics**

Long-Term Options in Foreign Exchange and Interest Rate Markets

Effective approximation of FX/EQ options for the hybrid models: Heston and correlated Gaussian interest rates

Using Compiler-Engineering Algorithms for Building Payoff Languages

Foreign Exchange Derivatives: Market Conventions and Smile Dynamics

The Continuous-Time Lattice Method --- Option Pricing through Matrix Diagonalization

Accelerating the Calibration of Stochastic Volatility Models

Options Pricing - From Theory to Practice

Effectiveness of CPPI Strategies under Discrete-Time Trading

Selected Applications of Optimization in Finance

Optimization Software for Financial Mathematics

Options Pricing - From Theory to Practice

High Performance Computing Techniques in Finance

The British Option

Option Pricing with No-Arbitrage Constraints

The Law of the Minimal Price

Auto-Static for the People: Risk-Minimizing Hedges of Barrier Options

Dynamic Hedging of Variable Annuities – TwinStar: The AXA Way

High Performance Computing Techniques in Finance

Generalized Swap Market Model and the Valuation of Interest Rate Derivatives

#### Info line: info@workshop.mathfinance.com

The conference is sponsored by

Commerzbank AG, Financial Engineering Team d-fine GmbH
Sal. Oppenheim jr. & Cie. KGaA, Trading & Derivatives SciComp Europe
Lucht Probst Associates GmbH
SunGard
NumeriX Softward Ltd
Quanteam AG

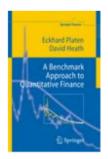
### **Preceding Workshop**

## Professor Dr Eckhard Platen

# A Benchmark Approach to Quantitative Finance

Saturday 15 March 2008, 9:00 a.m. - 6:00 p.m. Frankfurt, Germany

#### **Course Overview**



This one day workshop introduces into the benchmark approach, which provides a general framework for financial market modeling. It allows for a unified treatment of derivative pricing, portfolio optimization and risk management. It extends beyond the classical asset pricing theories, with significant differences emerging for longer dated products and risk measures. A new Law of the Minimal Price emerges for derivative pricing. A Diversification Theorem allows forming a proxy for the numeraire portfolio. The richer modeling framework of the benchmark approach allows the derivation of tractable, realistic models for equity indices, exchange rates, equities and the interest rate term structure fully under the real world probability measure. It will be explained how the approach differs from the classical risk neutral approach. Examples on long term and extreme maturity derivatives demonstrate the important fact that a range of contracts can be less expensively priced and hedged in reality than suggested by classical theory.

# All delegates will be given a complimentary copy of the book.

- Starting financial modeling from the numeraire portfolio
- Deriving the Law of the Minimal Price
- Approximating the numeraire portfolio via diversification
- Consistent utility maximization and portfolio optimization
- Pricing nonreplicable claims consistently as an investment
- Pricing and hedging long term and extreme maturity contracts
- Equity index, FX, equity and term structure derivatives.

#### Trainer



Eckhard Platen holds a Chair in Quantitative Finance at the University of Technology in Sydney. Prior to this appointment he was the Founding Head of the Centre for Financial Mathematics at the Institute of Advanced Studies at the Australian National University in Canberra. He has authored more than 130 articles in quantitative finance and applicable mathematics, and is the co-author of two successful books on Numerical Methods for Stochastic Differential Equations. Core ideas from his new book (Platen/Heath: A Benchmark Approach to Quantitative Finance, Springer Finance (2006), ISBN 3-540-26212-1) will be presented and expanded at the workshop.

#### **Audience**

The course is designed for portfolio managers, risk managers, financial engineers, financial analysts, quantitative analysts, traders, and researchers.

#### Cost

950 EUR plus VAT

The VAT in Germany is currently 19%.

#### Booking

You can book online at

http://conference.mathfinance.com/2008/benchmark/registration.php

#### Venue

Frankfurt School of Finance & Management, Room 16

More information and booking at http://conference.mathfinance.com/2008/benchmark/index.html